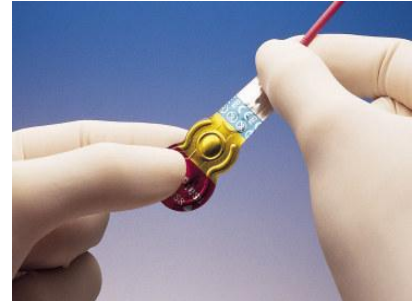


Using a Self-Etching Adhesive for Sealant Application (11/03)

Clinical trial of a self-etching adhesive for sealant application: Success at 24 months with Prompt L-Pop. Feigal RJ, Quelhas I. Am J Dent 2003;16:249-251.

Resin sealants are the caries-prevention workhorse for occlusal pits and fissures. However, the placement of sealants requires good moisture control and is not as successful on teeth that have not erupted sufficiently for adequate isolation. To assist in these problematic situations, total-etch dentin bonding agents have been shown to improve the sealant retention. This two-year clinical study evaluated Prompt L-Pop, a self-etching, one-step adhesive, as the sole enamel etchant prior to sealant placement. Patients of ages 7-13 years with newly-erupted bilateral first or second molars requiring sealants were used in this study. Within these patients, 18 pair of occlusal surfaces and 13 pair of buccal and lingual pits were treated with sealants. Delton visible light-cured sealant material was used. The control group consisted of one side of the mouth being treated with a common method of sealant application (cotton roll isolation, phosphoric acid etch, sealant placement and polymerization.) The experimental group consisted of the same treatment except that Prompt L-Pop was the enamel etchant. Sealant placement time for both groups was recorded. Scoring of the sealants was accomplished at placement and at one, three, and six months, and every six months thereafter for two years by two blinded observers. McNemar's Chi Square tests for match pair analysis was used to compare success rates between treatments. Results found no difference ($p > 0.8$) between the two treatment groups. Time required for control group placement averaged 3.1 minutes per tooth compared to 1.8 minutes required by the experimental group. **Results of this clinical study suggest that Prompt L-Pop, a one-bottle, self-etching bonding agents may effectively bond sealant to enamel and may simplify the procedure.**



DIS COMMENT: The placement of sealants in hard to isolate areas has always been problematic. Most of the newer one-bottle, self-etching bonding agents have been shown to have varying results bonding to dentin. Furthermore, some of these newer bonding agents do not have the capacity to effectively etch uncut enamel. Laboratory tests with Prompt L-Pop have shown that the bond to dentin is variable, but its ability to adequately etch uncut enamel has been reported. This clinical study shows that Prompt L-Pop performed just as well in less time than the traditional, phosphoric acid etch technique for sealant placement. It is important to note that it did not clinically perform better, but was equivalent to the traditional technique. Results obtained in this study should not be generalized to other self-etching, one-step bonding agents. Also keep in mind that the clinicians had chairside assistants and that this article was not totally clear in stating that the teeth selected in this study were those that were difficult to isolate.

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